

REMARKS

Claims 1-11 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1, 2, 5 and 7-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,963,312 (Roberts). This rejection is respectfully traversed.

In conventional approaches, faults may be isolated by checking error detection data embedded in the optical signals at each of the regenerators along an optical path. However, optical transport networks are beginning to employ partial regenerators that do not perform such error checking. Nonetheless, it remains important to be able to isolate the fault location within the network.

Applicant's invention is directed generally to a method for isolating faults in an optical path of an optical network. More specifically, Claim 1 recites "dithering the optical signal by varying an amplitude of the optical signal at two or more of said plurality of partial regenerators" in combination with the other elements of the claim. In this way, Applicant's claimed invention provides an innovative and effective technique for introducing test data at select partial regenerators along an optical path, thereby enabling sectionalizing of errors in the network.

Roberts is similarly directed to a system for locating sources of degradation along an optical path. However, Roberts does not teach or suggest a technique that is

suitable for an optical network having partial regenerators which do not perform digital error checking. Referring to Figure 2, Roberts discloses a technique in which the test data is introduced on an optical wavelength that is different than the optical wavelength which carries the primary data traffic. Drawbacks of carrying the test data on a different optical channel are readily understood in the art. Alternatively, Roberts discloses a technique in which the test data is interleaved with the data traffic at the transmitter as shown in Figure 3. Since this technique occurs prior to the optical domain, it is not suitable for use in a partial regenerator. Thus, Roberts fails to teach or suggest a technique for introducing test data at partial regenerators as recited in Applicant's claimed invention. Therefore, it is respectfully submitted that Claim 1, along with claims depending therefrom, defines patentable subject matter over Roberts.

Applicant notes that independent Claim 9 recite similar subject matter, and thus should be allowable, along with claims depending therefrom, for the same reasons as Claim 1. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.


CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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